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The effect of participatory instruction on the motivation of third grade students

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THE EFFECT OF PARTICIPATORY INSTRUCTION ON THE MOTIVATION OF THIRD GRADE STUDENTS

By
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ABSTRACT

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The purpose of this study was to determine the effect differing instructional techniques has on students' motivation in terms of their attitude towards school. Students were pretested using the Inventory to Measure Attitude Towards School and reading (IMATSR). After the pretest, the reading class was conducted in a lecture format with the entire class reading the same novel. Students read a portion of the book and then answered comprehensive questions on a worksheet, prior to discussion. When the book was completed, a comprehensive exam and IMATSR posttest were given. Next, the teacher introduced five books to the class. Each student ranked the books in the order they wished to read them. The students were then assigned to a book. The books were read in student led literature circles. After the completion of the book, the group presented their interpretation of it to the class. Once the presentations were completed, the class was again administered the IMATSR posttest. A Spearman's rho indicated a significant effect in terms of students not liking school, wanting to stay home from school, and the likeability of the follow-up activity. In conclusion the research indicated instructional techniques do effect motivation in terms of attitude towards school.

MINI-ABSTRACT

Jessica L. Deck, The Effect of Participatory Instruction on the Motivation of Third Grade Students, 2001, Dr. Randall Robinson advisor, Masters of Science in Teaching, Rowan University.

The purpose of this study was to determine the effect differing instructional techniques has on students' motivation in terms of their attitude towards school. The students were pretested and read a book as a class, answering questions on worksheets. After a comprehensive exam and posttest, the students worked in student led literature circles. They then presented their interpretations of the book to the class and completed a posttest. A Spearman's rho was calculated indicating instructional techniques do effect motivation in terms of attitude towards school and further research is warranted.

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Chapter I

Scope of the Study

Introduction

Many educators and parents are concerned about a decline in motivation that prevails among fourth grade students. Educators have seen a major change in attitude towards school between the third and fourth grade years of school. Some attribute this decline in motivation to be a factor of classroom style since the atmosphere of the primary and upper elementary grades are quite different (Williams, 1976). It is very difficult to challenge that most kindergarten, first-grade, and second-grade classrooms are very active rooms. Students have small attention spans, thus the activities change very rapidly. Conversely, in the upper elementary grades (fourth and fifth), students are expected to sit still and pay attention for longer periods of time. Additionally, more emphasis is placed on grades in the upper elementary classrooms (S. Levens, personal communication, March 12, 2001).

Third grade is essentially a transition period; it falls somewhere in between the primary and upper elementary classroom schemas (Connolly, 1992).

In terms of attitudes towards school, upper elementary students tend to dislike school more than primary elementary students. It is thought that the atmosphere of the classroom may affect the student's motivation (Connolly, 1992; Williams, 1976). Primary classrooms are mostly participatory while intermediate classrooms have a tendency to be more traditional (K. Turner, personal communication, October, 10, 2000). Could the instructional technique of the classroom change student motivation?

Statement of the Problem

It has come to the attention of researchers that lecture based classrooms and participatory classrooms have very different atmospheres, creating differences in students' attitudes towards school. Upper elementary students tend to dislike school; whereas, lower elementary student tend to enjoy school. It is assumed that those students who do not like school are not motivated to learn. Why do these students suddenly not like school? Might the reason have something to do with the academic subject matter? Might the reason be that the students are required to sit still for longer periods of time? Might the reason be the competitiveness of now receiving traditional letter grades? This study attempted to measure attitudinal changes towards school based on the instructional technique to which the student is exposed.

Statement of the Hypothesis

It was hypothesized that third grade students who are exposed to a participatory instructional technique will exhibit significantly higher scores in motivation in terms of their attitude towards school than third grade students who are exposed to a traditional lecture instructional technique.

Limitations

There are many possible confounds to this study, including that the sample was not randomly assigned but instead chosen by someone other than the researcher conducting the present study. Additionally, the procedures had limitations in that students were only being exposed to subject matter manipulation in reading rather than in every subject during the day. To best test this hypothesis, the student's entire day should have been manipulated; however, due to time and other constraints, this was not possible in the current study. The time constraints of four months also hindered the use of an ABAB experimental design. An ABAB experimental design would have been ideal for this study, as it would have shown that any changes in behavior were not likely to have been by chance.

Definition of Terms

The following terms have been operationally defined for the purposes of this study:

Motivation- The student's attitude towards school in terms of whether or not the student likes to go to school.

Traditional/Lecture based classroom- A classroom in which lecture and questions are the primary means of providing the students with information. This technique includes worksheets and paper and pencil memorization tests.

Participatory based classroom- A classroom in which the teacher permits the students to explore various resources to find the information on a subject themselves. This technique includes homogeneous literature circles and group presentations chosen by the students.

Chapter II

Review of Literature

Introduction

Third grade is often seen as a transition period in which attitudes towards school change (Williams, 1979). The purpose of this study is to determine whether or not instructional techniques effect attitudes towards school (Connonlly, 1992). It is hypothesized that a participatory instructional technique will result in higher motivational attitude than a traditional lecture technique.

Theories of Learning

Behaviorism

Behaviorism is a psychological approach that emphasizes the study of observable behavior and the role of the environment as a determinant of behavior. This theory attempts to explain the behavior of both humans and animals. There are two opposing sides to the coin of behaviorism, classical conditioning and operant conditioning. In classical conditioning Pavlov has shown that there are involuntary, or automatic, behaviors that are learned responses to specific stimuli; this is evident in his famous dog experiment where food produces salivation (Wade &Travis, 1996). On the other side of the coin is operant conditioning. Skinner showed that the consequences of a behavior are likely to affect the probability of that behavior occurring; unlike Pavlov, Skinner's behaviors were voluntary ones and not reflexes. Skinner believed behaviors followed by pleasant consequences were likely to be repeated; while behaviors followed by unpleasant consequences were likely to cease (Wade & Travis, 1996).

Social- learning theory

The Social-learning theory approach to learning grew out of behaviorism due to

its persistence of classical and operant conditioning. Social-learning theorists believe that people can learn through observation, imitation, insight, and positive consequences; thus, they must think about the environment around them (Wade & Travis, 1996). Bandura believed that people's behavior is self-regulated, or shaped by their own thoughts, values and intentions, because their behavior is not constantly changing or fluctuating with the constant changes in the environment around them. If people's behavior is somewhat constant, while the environment is changing, then behavior must somehow be internalized and regulated (Wade & Travis, 1996).

Constructivism

Similar to social-learning theory is the theory of constructivism, which believes the basis of learning is for the individual to construct his or her own understanding of the material at hand (Au, Mason, & Scheu, 1995). Constructivists believe that learning is an active, not passive, process; therefore, motivation is important, for if an individual is not motivated, they will not be active and learning will not take place (Clements, 1997). Individuals often are more motivated when they understand the purpose behind an activity (Au et. al, 1995). According to Vygotsky (Au et. al; Bee, 1997), learning is always being influenced by the surrounding environment.

Constructivism is implemented in the classroom throughout the use of authentic activities; activities which might be found in situations outside of the classroom. Additionally, teachers must emphasize the construction of meaning, rather tan correct answers (Au et. al, 1995).

Motivation

Motivation is an inferred process within a person or animal that causes that organism to move towards a goal (Wade & Travis, 1996).

Drive theory

"Biological needs result from states of physical deprivation, such as lack of food or water...This creates a state of tension that motivates an organism to satisfy the need"

(Hull, 405). Primary drives include hunger, thirst, and excessive cold and pain and are usually biological needs for survival (Ward and Bodner, 1993).

Field theory

Motivation is based on the external environment at any given point in time. Motivation is found (or not) when individuals interpret the environment themselves (Ward and Bodner, 1993).

Achievement theory

Achievement theory assumes that individual value the goal of achievement in a certain situation (Ward and Bodner, 1993).

Attribution theory

Attribution theory assumes that individuals wish to explore and understand the world around them (Ward and Bodner, 1993). This is done in an attempt to control one's own life.

Instruction

Lecture

The lecture format of teaching has been around since the times of the ancient Greeks and Romans. According to De Oliveria Lima (1983), this instructional format consists of demonstration, drilling, and consequences (appropriate awards or punishments). De Oliveria Lima argues that while today's school look different from those of the Greeks and Romans, the same beliefs underlie the system, as schools "communicate a static body of knowledge" (149). He believes that schools need to turn their attention towards more impertinent and current information, which is especially important with technology advancing as fast as it is. Schools should not force rote memorization of unimportant and out of date material on students who are not at all interested. As stated before, students need to be interested in the material in order to learn it. Piaget believes (according to De Oliveria Lima) that students can only learn if they are active and attach importance to the activity at hand; therefore, the lecture format

is of no use since it relies on the passivity of students.

This does not mean that lecture is completely bad; it does have its place. According to Butta (1998), one aspect of lecture is the discussion which "promotes better thinking skills and clearer understanding" (10). However, she also poses some disagreeable aspects as well. First, Butta agrees with de Olivia Lima in that lecture instruction relies on the passivity of the student. Furthermore, lecture formats require the students to memorize content that cannot be transferred to other situations (Butta, 1998). Consequently, there is little use of lecture instruction by itself in today's schools.

Cooperative groups

It is a general thought that cooperative groups are the answer to lecture instruction; however, problems have arisen with this instructional technique as well. One dilemma is that negative interactions often arise out of groups, hindering the learning process (Battistich V., Solomon, D., & Delucchi, K., 1994). Additionally, Battistich et. al. also found that many student in the group tend to sit back and relax while the more dominate students do all of the work. This defeats the purpose of having a cooperative group since the students are once again passive rather than active learners. Once again, there is a need to look for still a better way to conduct the classroom learning environment that will better ensure more activity from the students.

Hands-on instruction

Hands-on activities seem to be the answer for the passivity problem. Mechling and Oliver (1983) believe that hands-on activities are the answer to the problem of fact memorization and passivity. Hands-on activities promote problem-solving and thus bring about content learning (Mechiling & Oliver). Mechling and Oliver found an added bonus, another benefit of hand-on instruction: Students reading skills improve.

Respected education researcher John Dewey also believed that hands-on activities were "imperative in the educational process" (Korwin & Jones, 1990). According to Korwin and Jones, Dewey believed:

> Students could blend theory and practice, success and failure, and school and society into a mental foundation for future thought...Activities allow them to see, raise, and seek out solutions for personal and motivational questions. (p. 3)

Thus, hands-on activities allow the students to actively think about problems rather than being given the correct answer. Through this problem solving strategy, students come up with other questions and/or solutions that they are interested in. It is in this way that students are connecting the material to their own lives and digesting the concepts. Lipson and Fisher (as cited by Korwin & Jones) said it best, " Experiences without words are difficult to integrate, describe, and retrieve. Yet, words without experience tend to have limited meaning. The two reinforce each other and are defined by one another" (p. 3).

However, LeBuffe (as cited by Butta, 1998) may have said it even better in regarding a science curriculum:

1. Hands-on science is fun.
2. Hands-on science is instructionally sound.
3. Hands-on science provides the occasion for interdisciplinary learning.
4. Hands-on science promotes curriculum alignment.
5. Hands-on science accents activities in the real world.
6. Hands-on science can increase parent involvement.
7. Hands-on science is excellent for the use of cooperative learning. (p. 12)

Instruction and Achievement

Studies have shown that due to rote memorization, lecture instruction has a very high forgetting rate; material is only learned for the test and cannot be applied to other situations (Butta, 1998; Mulrayan, 1992; Korwin & Jones, 1990; de Olivia Lima, 1983; and Mechling & Oliver, 1983). Additionally, many students have difficulties memorizing the information to begin with, so test scores are already low.

The achievement rates of cooperative groups depend upon the make-up of the group and the individual. If the student is passive and allows other to dominate the

group, he/she will not take anything away and will still be at square one; a student who is involved in the group will take away more and be ahead of the game (Battistich, Solomon, & Delucchi, 1993).

Hands-on activities bolster achievement scores due to their nature in forcing students to actively solve problems (Butta, 1998; Connolly, 1992; Korwin & Jones, 1990; and Mechling & Oliver, 1983). Butta found that when comparing lecture and hands-on instruction, the hands-on technique allowed the students to score higher on academic tests. Korwin and Jones discovered that hands-on activities brought about higher levels of cognitive knowledge, as proven on a test, and greater retention of that knowledge as opposed to a lecture format for the same material.

Instruction and Attitude

Connolly's (1992) research on preretirement education shows that adults not only learn more information from a hands-on approach than a lecture approach, but they also have a better attitude towards retirement than their lecture instructed counterparts due. Connolly's study suggests that "...participation is associated not only with positive attitude change but also with positive behavior change" (377). These findings need to be examined at the school-age level.

Primary and upper elementary classrooms have very different atmospheres, third grade being somewhere in the middle. It is known that a significant decline in motivation has been found in fourth grade students (Williams, 1976). It is only natural to believe that this decline begins the year before, during third grade and the sudden decline most people recognize between the third and fourth grade years is actually a continuing, but more rapid decrease from the year before. The summer gap simply amplifies the decrease in motivation. Additionally, in September, parents and teachers often observe their fourth grade students do not want to got to school, while the year before, the same children were excited to begin the third grade. Therefore, the decrease in motivation may also be amplified by the manner in which the 2 age groups are compared.

A plethora of information exists regarding lecture instruction vs. participatory instruction in terms of academic achievement. Due to the overwhelming findings that participatory instruction significantly increases achievement more so than lecture instruction, this aspect was not addressed in the current study (Daniels, 1998; Miller & Meece, 1997; Battistich, Solomon, & Delucchi, 1993; Davis, 1993; Ward & Bodner, 1993; Connolly, 1992; Meching & Oliver, 1983; de Oliverira Lima, 1983).

Research regarding instructional technique and motivation to do work greatly leans in favor of a participatory approach. Miller and Meece (1997) found that students were more motivated to work when the classroom did not emphasize competition among students for grades, recognition or rewards. Additionally, they found that classrooms which emphasis rote learning promoted a work-avoidance student rather than motivated student (Miller & Meece); thus students need to be active in order to be motivated.

Motivation to do the actual work can be seen in the activities that students undertake. Due to the hands-on nature of the primary grades, students are constantly working with their peers in collaborative groups. These groups have been shown to motivate students to do their work more often than assignments to be completed alone (Battistich et. al., 1993). Similarly, it was found that lecture instruction based on a textbook produced a homogeneous classroom; whereas, participatory instruction produced a more heterogeneous classroom of individual thinkers and problem solvers (Cobb et. al., 1992).

Unfortunately, there is little research regarding the issue of instructional technique and a student's attitude towards school. Research on the effect instructional technique has on attitude towards the material does exist. Connonlly (1992) found that attitudes towards retirement were effected by instructional style; those in a participatory setting were found to score significantly higher on an attitudinal scale than those in a lecture/discussion setting. If adults who spend the majority of their day outside of the classroom are significantly affected by instructional technique, it should be assumed that

students who spend their entire day in the classroom would also be affected by the same techniques.

Chapter III

Procedures and Design

Introduction

Many educators and parents are concerned with a decline in student attitude towards school during the intermediate elementary years (grades four to six) (Williams, 1979). It is believed that this change takes place during the transitional third grade year (Connolly, 1992). The present study suggested that the decline may be due to differing instructional techniques in the primary and intermediate classrooms. It was hypothesized that a participatory instructional technique will produce an increase in student attitude towards school than a traditional lecture instructional technique.

Sample Population

The participants of this study were 54 third-grade students from a suburban, middle-class elementary school in southern New Jersey. Included in this third grade class were 23 (42%) females and 31 (58%) males. The class included 48 (89%) Whites, 3 (5%) Asians, 2 (4%) Hispanics, and 1 (2%) African-American.

The students had been divided into 2 classes for the 2000-01 school year randomly by the school district. The class used for the control group consisted of 28 students, comprised of 12 (43%) females and 16 (57%) males. Races represented by this class include 25 (89%) White, 1 (4%) Asian, 1 (4%) Hispanic, and 1 (4%) African-American. The experimental group consisted of a class of 26 students comprised of 11 (42%) females and 15 (58%) males. Races represented include 23 (88%) white, 2 (8%) Asian, and 1 (4%) Hispanic. Both classroom teachers were female. All subjects scored either average or above average on literacy portions of standardized test scores from the previous year.

Procedures

Experimental Group

First, a questionnaire as part of the Inventory to Measure Attitude Towards School and Reading (IMATSR), constructed by the researcher, and letter were sent to the parents, asking them to participate voluntarily (see appendix A). Following this, the students were given the IMATSR (see appendix B). Both parental and student IMATSR forms were numbered on the back, according to numbers assigned to the students by the teacher; the researcher does not have knowledge as to which number was assigned to which to student. After students were given the first IMATSR, the researcher conducted the reading class using a traditional lecture instructional technique. For this experiment, the whole class read the book entitled Sadako written by Eleanor Coerr. The book Sadako was divided into the following 6 sections: chapter1, chapter 2, chapter 3, chapters 4-5, chapter 6, and chapters 7-9. The researcher read chapter 1 aloud to the students while they followed in their books, afterwards, they were asked to complete a worksheet. The worksheet had vocabulary words and comprehension questions from the chapter (see appendix C). The answers were then discussed after all of the students were completed.

The following day, the researcher had the students read chapter 2 and 3 to themselves, after which, they were to complete one of the 2 worksheets (see appendix C) (half of the class completed chapter 2 and half completed chapter 3). The answers for both worksheets were discussed before the end of class. Students were told to write in the answers for the worksheet that they had not completed. The third day, the students read chapters 4 and 5 and completed the corresponding worksheet (see appendix C). On the fourth day, students read chapter 6 and completed the corresponding worksheet (see appendix C). The fifth day, chapters 7-9 were read by the students, who then completed the worksheet (see appendix C). After the completion of the last chapter, the students were told to take their worksheets home to study, due to a test they had the following day. A comprehensive test, including matching, fill in the blank, true/false, and essay, was

given on the sixth day (see appendix D). Following the completion of the test, students were asked to complete version 2 of the IMATSR (see appendix B).

While the students were reading the book Sadako, the researcher, along with the help of the cooperating teacher, choose the following 5 books to use for the literature circles: Mufarou's Beautiful Daughters, Three Wishes, The Paper Bag Princess, and Lon Po Po. After completion of the comprehensive test, the cooperating teacher gave a 2-3 minute introduction to each book in order to spark student interest. The students were then given a piece of paper on which to write their name, and the 3 books that they would be interested in reading (ranking them in order, 1 being the highest). The slips were then collected and students were assigned to groups based on their choices. Students were assigned either to their first or second choice. The day after the comprehension test, students began reading their literature circle books.

During literature circles students assign themselves roles: Discussion director, summarizer, word finder, passage finder or connector. After a selected portion of the book was read, students met in a group which was lead by the discussion director. They then discuss what they have written on their literature circle papers. The researcher was present at the group meeting and observed the discussions. On day 1 of the literature circles, The Crane Wife, The Paper Bag Princess, and Three Wishes groups were given their chosen book and began reading. The other two groups did not receive their books on the day 1 due to absentees. On day 2, Lon Po Po and Mufarou's Beautiful Daughter groups received their books and began reading. Additionally, the other three groups met and discussed their previously read sections. On day 3, three groups met and discussed the sections they had read. Finally on day 4, the last three groups met and discussed their section of the book. At this point, all groups had finished their books.

Once the literature circle books had been competed, the researcher told the class that they were going to present their book to the class. This presentation could have included a poster, an essay, a drama, or a comic strip. The purpose of the presentations

was for the students who had read the book to tell the other students about it so that they would be interested in reading the book in their free time. Each group decided how they would like to present their book. Students were given 3 days to prepare their presentations. On the seventh day of the literature circles, the students presented their book to the class. After the presentations, students were asked to once again complete version 2 of the IMATSR (see appendix B).

Control Group

While the experimental group was reading the book Sadako and their literature circle books, the control group was also doing literature circles. These students were asked to complete version 2 of the IMATSR after they finished reading a literature circle book.

Description of Instruments

The Inventory to Measure Attitude Towards School and Reading (IMATSR) was developed by this researcher (see appendix B). The IMATSR consists of three sections which are given at separate times. The first section is the parental questionnaire. The second section is the long version of the students' questionnaire. And the final section is the short version of the student questionnaire.

Parental Questionnaire (PQ)

The parental questionnaire consists of 6 questions. The first four ask how often the student says he/she does not like school or tries to stay home from school in an average week. It also contains question regarding how often the child reads on their own or is read to at home. In answering these questions, the participant circles the given number.

The last two questions concern what types of materials the student enjoys reading and where the child enjoys reading. These questions have various options (i.e. newspaper, comic book, in bed, on the floor) which the participant circles.

Long Student Questionnaire (LSQ)

The long version of the student questionnaire contains many of the same questions as the PQ. Students are asked how often they read at home, what types of materials they enjoy reading, where they like to read, and when they like to read. Additionally, students are asked Likert style if they like reading by themselves, in large groups, or in small groups. Likert style questions are answered by coloring in the corresponding smiling or sad faces.

Short Student Questionnaire (SSQ)

The short version of the student questionnaire contains four questions. How many times during the week they told their parents they did not like school and how many times they tried to stay home from school. These two questions were answered by circling the corresponding number. The last two questions utilized a Likert scale. They asked how well they liked the book that they just read, and how much they enjoyed the activity that followed the book. Student colored in smiling or sad faces for these questions.

Chapter IV

Analysis of Findings

Introduction

A decline in student attitude towards school during the intermediate elementary school years has been noticed by teachers and parents (Williams, 1979). It is believed by some that this decline actually manifests itself during the third grade year of school (Connolly, 1992). The purpose of this study was to determine whether instructional techniques effect changes in attitude towards school. It was hypothesized that a participatory technique would yield an increase in student attitude rather than a traditional lecture technique.

Analysis of Data

The data was correlated to determine significance. A Spearman's rho was computed between the two posttests on all four variables: wanting to stay at home, not liking school, liking the book read, and liking the follow-up activity. For students wanting to stay home from school, a main effect was significant, $r_s = 0.583, p < 0.01$. A main effect was also found to be significant for students saying that they did not like school, $r_s = 0.724, p < 0.05$. Additionally, a main effect was found to be significant for liking the follow-up activity, $r_s = 0.496\ p < 0.05$. No significant differences were found between the control group and the pretest in the area of students wanting to stay home from school, between the two posttests and the control group on the issue of liking the book, nor between the pretest, both posttests, and control group on the issue of not liking school.

To find which intervention yielded a stronger rank, frequency distributions were examined in regard to those topics with significant main effects. On the issue of not

liking school, 3 students had told their parents once during the week of reading Sadako that did not like school, compared to 1 students to who had told their parents once during the week of literature circles that they did not like school (see table 1 for frequency distributions).

table 1

Frequency Distributions for Students Not Liking School

Posttest 1 (Sadako)		Posttest 2 (Literature Circles)	
Score	Frequency	Score	Frequency
0	21	0	23
1	2	1	1
2	0	2	0
3	1	3	0
4	0	4	0
5	0	5	0

While reading Sadako, 2 students told their parents once that they wanted to stay home from school. Five students told their parents once that they wanted to stay home from school during the literature circle treatment (see table 2 for frequency distributions).

table 2

Frequency Distributions for Students Wanting to Stay Home from School

Posttest 1 (Sadako)		Posttest 2 (Literature Circles)	
Score	Frequency	Score	Frequency
0	22	0	19
1	2	1	3
2	0	2	0
3	0	3	0
4	0	4	0
5	0	5	0

During Sadako, a total of 8 students ranked the follow-up activity as either a 4 or 5, compared to the 18 students who ranked the follow-up activity for the literature circles as a 4 or 5 (see table 3 for exact frequency distributions).

table 3

Frequency Distributions for Ranking the Follow-up Activity

Posttest 1 (Sadako)		Posttest 2 (Literature Circles)	
Score	Frequency	Score	Frequency
1	6	1	1
2	4	2	1
3	6	3	4
4	5	4	6
5	3	5	12

Chapter V

Summary, Conclusions, & Recommendations

Introduction

An attitudinal decline towards school has been noticed in the fourth grade students (Williams, 1979). Connolly (1992), believes this decline actually begins with the transitional third grade year. This paper proposes that the decline may actually be due to differing instructional techniques employed in the primary and intermediate elementary grades. These differences are due developmental differences in the students. Students in the primary elementary grades often have smaller attention spans, thus activities change rapidly. Students in the intermediate elementary grades are expected to sit still for longer periods of time and more emphasis is placed on grades (S. Levens, personal communication, March 12, 2001). It was hypothesized that a participatory instructional technique would increase attitude towards school rather than a traditional lecture instructional technique.

Summary of the Problem

Teachers and parents have noticed a decline in student motivation in terms of their attitude towards school. This decline is evident in the intermediate elementary years. It is believed that if students do not like school, they are not motivated to learn. It is thought that atmospheric differences between primary and intermediate classrooms may play a part in the decline; however, the decline may also be due to other circumstances including the subject matter and competitiveness of receiving traditional letter grades. This study attempted to measure the attitudinal changes towards school based on the instructional technique to which the students were exposed.

Summary of the Hypothesis

It was hypothesized that third grade students who are exposed to a participatory instructional technique will exhibit significantly higher scores in motivation in terms of their attitude towards school than third grade students who are exposed to a traditional lecture instructional technique.

Summary of the Procedures

The Inventory to Measure Attitude Towards School and Reading (IMATSR) was developed. The parent questionnaire portion was sent home with a letter asking parents to participate. Students were administered the IMATSR. The class as a whole read the book Sadako, by Eleanor Coerr, in 6 sections. After each section, the students completed a worksheet which was then discussed in class. When the book was completed, a comprehensive exam was administered. Following the exam, students were administered the IMATSR version 2.

After the book Sadako was completed, the teacher gave a short description, or book talk, to the class on 5 books. The students then ranked these books in the order in which they wished to read them. Students were assigned to groups of 5 or 6 based on these rankings. After reading a section of the book, students completed a literature circle paper that pertained to their particular job. The students then met together to discuss the portion of the book they read. Once the groups had finished reading and discussing, they were asked to somehow present the book to the class in order to get others interested in reading it. After the presentations, the students were once again administered the IMATSR version 2.

At the same time, the experimental group was reading Sadako and the literature circle book, a control group was also working in literature circles. When the group was done a book, they completed the IMATSR version 2.

Summary of the Findings

The results show that fewer students told their parents that they disliked school

while participating in literature circle groups. However, at the same time, more students asked their parents if they could stay home from school during the literature circle period. Finally, more students liked the follow-up activity associated with the literature circle group than with the Sadako book.

Conclusions

Since the results indicate that the students told their parents that they did not like school less during the literature circle period, then it can be deduced that the students liked school more when the participatory instructional technique was used than when the traditional lecture style instructional technique was used. The fact that the students liked the follow-up activity for the literature circle period more than for the Sadako period further illustrates this idea. However, it is apparent that the students asked their parents if they could stay home from school more during the literature circle period than during the Sadako period. These results could be due to the circumstances sounding the experiment. For example, the literature circle period began after the students returned from spring break; thus they may have been more likely to ask to stay home.

Implications and Recommendations

Due to the fact that this study was not as comprehensive as it should have been, more research needs to be done in the area of attitude towards school and instructional technique. However, this study did have some implications that teachers and administrators should take into consideration. If more students like the participatory instructional technique, and thus like school more, then, according to previous research, they will be more motivated to learn. Thus, teachers should include more participatory instructional techniques in the intermediate elementary grades, as well as, use more authentic means of assessment.

It is the recommendation of this researcher that this area of education be further investigated. Ideally, the entire school day would need to be manipulated to truly understand how instructional techniques impact a student's attitude towards school.

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Appendix A

Letter to Parents

Dear Parent,

I am currently working on a research project that is required for obtaining the Master of Science in Teaching degree I am working towards at Rowan University. I am researching possible explanations behind students' attitudes towards school. I would appreciate it if you would please fill out the enclosed questionnaire and return it to school with your child. All answers will be kept confidential as names are not required on the returned survey; therefore, I will not know which questionnaire belongs to which student. Thank you for your cooperation.

Sincerely,

Jessica Deck

Appendix B

Inventory to Measure Attitude Towards

School and Reading

Parent Questionnaire

1. How many times this week did your child tell you that they do not like school?

   0 1-2 3-4 5-6 6+

2. How many times this week did your child try to get you to let them stay home from school?

   0 1 2 3 4 5

3. How often does your child read on their own at home per week? (hours)

   0-1 2-3 4-5 6+

4. How often do you read to your child at home per week? (hours)

   0-1 2-3 4-5 6+

5. What types of things does your child like to read? (circle all that apply)

   Newspaper comic books magazine comic strip

   Fiction nonfiction other_____

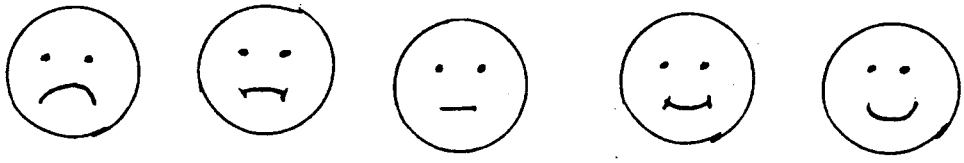
6. Where does your child like to read? (circle all that apply)

   in bed on the floor on the couch in a chair

   at the table in a hiding place outside

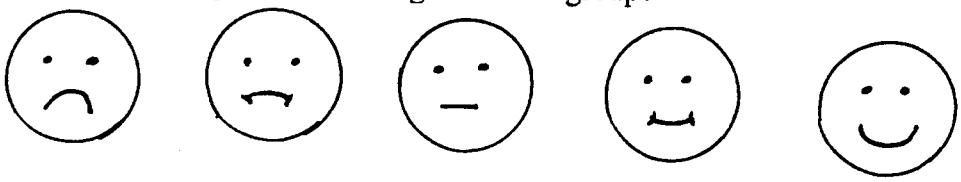
Pretest

1. How much do you like reading by yourself?



2. How much do you like reading in a large group?

3. How much do you like reading in a small group?



4. How often do you read on your own at home per week? (hours)

0-1 1-2 3-4 5-6 6+

5. What types of things do you like to read? (circle all that apply)

newspaper comic book magazine comic strip

fiction nonfiction other_____

6. When do you like to read?

Morning afternoon night other_____

7. Where do you like to read?

In bed on the floor on the couch in a chair

At the table in a hiding place outside

8. How many times last week did you tell your parents you do not like school?

0 1 2 3 4 5

9. How many times last week did you try to get your parents to let you stay home from school?

0 1 2 3 4 5

Posttest

1. How many times this week did you tell your parents you do not like school?

   0 1-2 3-4 5-6 6+

2. How many times this week did you try to get your parents to let you stay home from school?

   0 1 2 3 4 5

3. How well did you like the book we just read?

4. How well did you like the activity that followed the reading?

Appendix C

Sadako Worksheets

Chapter 1: Good Luck Signs

Vocabulary:

memorial (11)

leukemia (13)

carnival (11)

radiation (13)

Comprehension Questions:

1. What things about Japanese life does this chapter show that are different from typical US life?

2. What good luck-signs does Sadako find? What do you consider to be good-luck charms or signs?

3. Compare Sadako's view of Peace Day with her parents' view of it.

4. What examples of irony do you find in this chapter?

Chapter 2: Peace Day

Vocabulary:

prickled (18)

scarred (18)

Buddhist (18)

bean cakes (18)

Comprehension Questions:

1. What reminders of the bomb does Sadako encounter? How does she react? How do you react to frightening pictures or disfigured people?

2. Find at least two similes in this chapter.

3. Whose name does Sadako put on her lantern? Why?

4. Sadako was only two years old when the bomb was dropped. Do you think she really could have remembered it?

Chapter 3: Sadako's Secret

Vocabulary:

bamboo (22)

chime (26)

shrine (26)

kimono (26)

amidst (27)

Comprehension Questions:

1. Why does Sadako feel better on New Year's Day?

2. List the Japanese New Year's customs mentioned in this chapter.

3. Why do you think Sadako doesn't tell anyone about her dizzy spells?

4. Describe the different feelings about the big race that Sadako experiences.

Chapter 4 & 5: A Secret No Longer & The Golden Crane

Vocabulary:

pang (29)

x-ray (29)

plumped (32)

lopsided (36)

mischief (37)

parasols (39)

Comprehension Questions:

1. How does each member of the Sasaki family react to Sadako's illness?

2. Compare how Sadako feels before and after Chizuko's visit.

3. Why does Sadako decide to make one thousand paper cranes? What is special about the golden crane?

Chapter 6: Kenji

Vocabulary:

recovered (41)

miracle (44)

blood count (44)

flustered (44)

sternly (44)

Comprehension Questions:

1. List the symptoms of leukemia Sadako is now experiencing.

2. What does Sadako do to comfort Kenji?

3. How does Nurse Yasunaga react when Kenji and Sadako each suggest they will die? Do you think this is the best response under the circumstances? Why or why not?

4. What does Nurse Yasunaga tell Sadako about Kenji after he dies? Why might she say this to Sadako?

Chapters 7-9: Hundreds of Wishes, Last Days, & Racing with the Wind

Vocabulary:

listless (48)

gruffly (55)

transfusion (56)

rustle (63)

Comprehension Questions:

1. In what ways does Sadako exhibit courage? What helps her to fight her fears?

2. What ideas does Sadako exhibit have about death?

3. Where does the author suggest Sadako's spirit may have gone? How does the ending echo Nurse Yasunaga's words after Kenji's death?

4. Skim back over the book and list the various Japanese attitudes toward death and afterlife that are mentioned.

Appendix D

Sadako Comprehensive Test

Comprehension Test

Part I Matching (2 points each)
Read each character description. In the list below, find the character who matches the description. Write the letter of the character in the space next to the description number.

_____1. Promises to hang every crane Sadako makes.

_____2. Died on the day the bomb was dropped.

_____3. Sadako's best friend.

_____4. Dreams of getting on the running team in junior high school.

_____5. Takes Sadako to the hospital after she collapses.

_____6. Sadako's little brother.

_____7. Comforts Sadako after a boy in the hospital dies.

_____8. Brings Sadako a meal of all her favorite foods in the hospital.

_____9. Sadako's little sister.

_____10. Has few visitors in the hospital.

_____11. Makes a beautiful golden crane.

_____12. Allows Sadako to go home for a visit in July.

_____13. Always in a hurry to be first.

_____14. Receives one of Sadako's cranes as a gift.

_____15. Visits Sadako every day.

a. Sadako	b. Masahiro	c. Chizuko	d. Eiji	e. Kenji
f. Mitsue	g. Mrs. Sasaki	h. Mr. Sasaki	i. Oba chan	j. Dr. Numata
k. Nurse Yasunaga				

Part II Fill-in (2 points each)
Write a word in each blank to make each statement true.

1. The Sasaki family attends the _____ Day ceremonies on August 6 every year.

2. The family prays at its alter for the spirits of its _____.

3. The "atom bomb disease" is _____.

4. Sadako's mother makes her a silk _____ with cherry blossoms on it.

5. Te Sasaki family lives in the city of _____.

6. Sadako collapses while she is _____ in the schoolyard.

7. The first symptom Sadako notices of her illness is _____.

8. The Sasaki family floats candlelit paper _____ in memory of their relatives killed by the bomb.

9. Sadako calls herself a _____ whenever she is slow or clumsy.

10. Sadako and her family call the atom bomb the _____.

11. Sadako asks her parents to put her favorite food, _____ _____ , on the home alter for her spirit.

12. The atom bomb filled the air with _____ , a poison that stays inside people for a long time.

13. Sadako is elated when her class chooses her to compete in the _____ _____ on Field Day.

14. Sadako considers the _____ _____ to be her special good luck omen in the hospital.

15. When Sadako gets very weak, she must have shots and blood _____ almost every day.

Part III True/False (2 points each)

_____1. Kenji became ill because he was nearby when the bomb was dropped.

_____2. Sadako thinks spiders are a lucky omen.

_____3. Sadako speaks comfortingly to the atom bomb victims at the memorial ceremonies.

_____4. Once Sadako enters the hospital, she never comes home again.

_____5. Sadako manages to make more than 600 cranes.

_____6. Chizuko tells Sadako the legend of the crane.

_____7. Sadako confides only to Chizuko that she is suffering from spells of illness.

_____8. The bamboo class sends Sadako a *Kokeshi* doll to cheer her up.

_____9. Sadako's illness keeps her from winning the race.

_____10. The Sasaki family is not wealthy.

Part IV Essay Questions (10 points each)

Choose any *two* of these four questions to answer. Write one or two paragraphs for each of the two questions you choose.

1. Sadako is constantly looking for good-luck signs. Describe as many of them as you can, and tell how they affect Sadako's outlook.

2. In what ways does Sadako keep up her courage? How effective are these methods?

3. How do Sadako's friends and family try to help her? How does Sadako react to their efforts?

4. Some people were so badly burned by the bomb that they "no longer looked human" and spend the rest of their lives this way. Other people appear untouched by the bomb but eventually develop leukemia and then die. Which do you think is preferable, or the lesser of the two evils?

Vita

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